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| 09/652,035 | 08/31/2000 | Jurgen Babst | 0307-0145P | 4551 |
| 2292 | 7590 | 08/26/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH | | | SPOONER, LAMONT M | |
| PO BOX 747 | | | ART UNIT | |
| FALLS CHURCH, VA 22040-0747 | | | PAPER NUMBER | |
| | | | 2654 | |

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,035

Applicant(s)

BABST ET AL.

Examiner

Lamont M Spooner

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Oath/Declaration

1. It does not identify the citizenship of each inventor.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1-7, 9-13, 14-20, 22-26, 27-33, 35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Kadashevich et al. (US Patent No. 5,369,577 Nov. 29,1994).

As per **claim 1, 14, 27**, Kadashevich et al. (herein referred to as Kadashevich) disclose a method comprising:

receiving input of a plurality of symbols (Fig. 3 item 102);

determining whether or not the plurality of input symbols include a sequence of symbols dependent upon at least one other symbol (C.16.lines 35-41-the last symbol in the stem is determined as dependent upon at least one other symbol, the suffix, C.17.lines 1-27, C.34.lines 13-24); and

morphing a stored word corresponding to a symbol sequence including the at least one other symbol, in response to determining that the plurality of input symbols included a dependent sequence, to produce at least one modified form of the stored word (C.19.lines 1-53-in response to the suffix bit being present, morphing the stored stem is actuated, C.22.lines 26-32).

As per **claim 2, 15 and 28**, Kadashevich disclose all of the limitations of claim 1, upon which claim 2 depends. Kadashevich further disclose:

the symbols are input by actuation of corresponding keys on a keyboard
(C.1.lines 56-58, C.4.line 16).

As per **claim 3, 16 and 29**, Kadashevich disclose all of the limitations of claim 1, upon which claim 3 depends. Kadashevich further disclose:

storing words in a database corresponding to symbol sequences (C.4.lines 18-22).

As per **claim 4, 17 and 30**, Kadashevich disclose all of the limitations of claim 3, upon which claim 4 depends. Kadashevich further disclose:

the database also includes morphing codes, stored in association with the words and used in morphing the stored words (C.17.lines 30-41, C.18.lines 25-53-classes).

As per **claim 5, 18 and 31**, Kadashevich disclose all of the limitations of claim 4, upon which claim 5 depends. Kadashevich further disclose:

the morphing codes indicate a part of speech of the stored words (C.17.lines 35-41).

As per **claim 6, 19, and 32**, Kadashevich disclose all of the limitations of claim 5, upon which claim 6 depends. Kadashevich further disclose:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (C.17.lines 30-47).

As per **claim 7, 20 and 33**, Kadashevich disclose all of the limitations of claim 1, upon which claim 7 depends. Kadashevich further disclose:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (C.17.lines 30-47).

As per **claim 9, 22, and 35**, Kadashevich disclose all of the limitations of claim 1, upon which claim 9 depends. Kadashevich further disclose:

accessing a stored word corresponding to a sequence of the plurality of input symbols, in response to determining that the plurality of input symbols did not include a dependent sequence (C.26.lines 3-9)

As per **claim 10, 23 and 36**, Kadashevich disclose all of the limitations of claim 1, upon which claim 10 depends. Kadashevich further disclose:

replacing a dependent symbol sequence with the at least one other symbol, in response to determining that the plurality of input symbols included a dependent sequence (C.18.lines 25-53, C.22.lines 26-31-shoot is replaced by shooting, in response to shoot being a dependent symbol sequence in verb form), wherein

a stored word corresponding to a symbol sequence including the substituted at least one symbol is morphed (C.18.lines 25-53, C.22.lines 26-31-shoot is morphed into shooting).

As per **claim 11, 24 and 37**, Kadashevich disclose all of the limitations of claim 10, upon which claim 11 depends. Kadashevich further disclose:

storing words in a database corresponding to symbol sequences (C.4.lines 18-22).

As per **claim 12, 25 and 38**, Kadashevich disclose all of the limitations of claim 11, upon which claim 12 depends. Kadashevich further disclose:

the database also includes morphing codes, stored in association with the words and used in morphing the stored words (C.24.lines 23-38).

As per **claim 13, 26 and 39**, Kadashevich disclose all of the limitations of claim 12, upon which claim 13 depends. Kadashevich further disclose:

the morphing codes indicate a part of speech of the stored words (C.17.lines 35-41).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8, 21 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Kadashevich in view of Guinan (US Patent No. 6,022,222 Feb. 8, 2000).

Kadashevich and Guinan are analogous art in that they both involve text input and data retrieval.

As per **claims 8, 21 and 34**, Kadashevich discloses all of the limitations of claim 1, upon which claim 8 depends. Kadashevich does not disclose:

the symbols include pictorial illustrations.

However, Guinan teaches having the symbols include pictorial illustrations (Fig. 1). Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to combine Kadashevich with Guinan. The motivation for doing so would have been to provide correspondence between pictorial representations and

Art Unit: 2654

words to assist in alleviating the necessity of relying upon a first language (C.3.lines 4-14).

6. Claims 40-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadashevich in view of Masui (US Patent No. 5,959,629 Sep. 28, 1999).

Kadashevich and Masui are analogous art in that they both involve text input and data retrieval.

As per **claims 40, 45 and 50** , Kadashevich disclose a word prediction method comprising:

displaying a plurality of selectable words beginning with an input character, (C.33.lines 1-9-beginning input character, C.34.lines 7-24);

determining whether or not morphing data is stored in association with a selected word, in response to receiving selection of a displayed word (C.34.lines 25-40) ;

morphing the selected word in response to determining that morphing data is stored in association with the selected word (C.35.lines 19-68, C.36.lines 1-48); and

displaying morphs of the selected word for further selection (C.2.lines 51-60, C.4.lines 18-42).

Kadashevich does not explicitly disclose:

displaying a plurality of selectable words beginning with an input character, in response to receipt of the input character;

However, Masui teaches displaying a plurality of selectable words beginning with an input character, in response to receipt of the input character (C.6.lines 7-29).

Therefore, at the time of the invention, it would have been obvious to one ordinarily

Art Unit: 2654

skilled in the art to combine Kadashevich with Masui. The motivation for doing so would have been to predict preferred words beginning with the input character, which could include a proximate word or variation of a desired predicted word (C.6.lines 19-49).

As per **claims 41, 46 and 51**, Kadashevich and Masui disclose all of the limitations of claim 40, upon which claim 41 depends. Kadashevich further discloses:

storing words, and morphing data in association with at least one of the words, in a database (C.4.lines 33-44).

As per **claims 42, 47 and 52**, Kadashevich and Masui disclose all of the limitations of claim 41, upon which claim 42 depends. Kadashevich further discloses:

the morphing data includes morphing codes indicating a part of speech of the stored words (C.17.lines 35-41).

As per **claims 43, 48 and 53**, Kadashevich and Masui disclose all of the limitations of claim 42, upon which claim 43 depends. Kadashevich further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (C.17.lines 30-47).

As per **claims 44, 49 and 54**, Kadashevich and Masui disclose all of the limitations of claim 40, upon which claim 44 depends. Kadashevich further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (C.17.lines 30-47).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2654

- Freeman (US Patent No. 5,621,641 Apr. 15, 1997) teaches having depend sequences of symbols based upon another symbol.
- Freeman (US Patent No. 5,649,223 Jul. 15, 1997) teaches generating inflectional information for automated word completion.
- Yanaguichi et al. (US Patent No. 4,438,505) teaches morphological analysis and auto completion of a partial word entry.
- Levin (US Patent No. 4,969,097 Nov. 6, 1990) teaches auto completion of abbreviated text from an input character, allowing selection of a desired word.
- Hachomovitch et al. (US Patent No 6,377,965 Nov. 7, 1997) teaches automatic word completion from partially entered data providing a suggestion list to the operator.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M Spooner whose telephone number is 703/305-8661. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Vo can be reached on 703/308-6728. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms
8/20/2004

Nguyen Vo
8-23-2004

NGUYENT.VO
PRIMARY EXAMINER